### Risk MAP

Meghan Sullivan

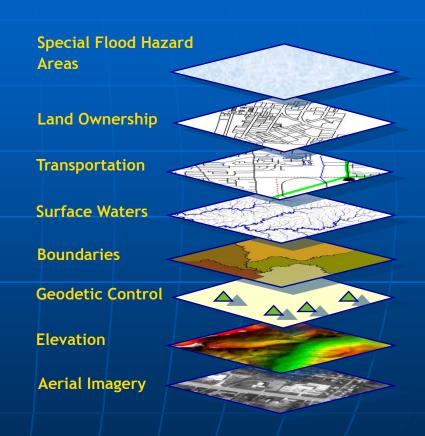
Map Modernization/Risk Map Coordinator
Rhode Island Emergency Management Agency

### Map Modernization

- Map Mod Program began in 2002 because:
  - Dynamic flood hazard conditions and old maps.
  - Desire for more timely updates and easier access to the data used to create the maps.
  - Up-to-date maps more closely align with actual risk and improve citizens' flood hazard awareness.
- Map Mod created a platform

### What's a DFIRM

- Digital Information
  - Files usable in GIS
- Easier to update
- Other pieces:
  - Metadata
  - Flood Insurance Study (FIS) report
  - Back-up data (models, etc.)

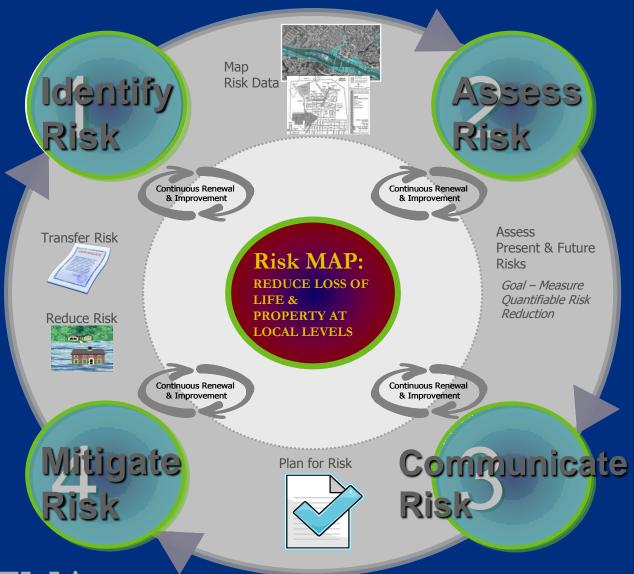


## With the end of Map Mod, now....

### Risk MAP

Risk Mapping, Assessment, and Planning

#### RISK ANALYSIS PROGRAMS





### Risk MAP Vision and Goals

"to deliver quality data that increases public awareness and leads to action that reduces risk to life and property."

- 1. Flood Hazard Data
- 2. Public Awareness/Outreach
- 3. Hazard Mitigation Planning
- 4. Enhanced Digital Platform
- 5. Alignment and Synergies

### Goal 1: Flood Hazard Data

"Address gaps in flood hazard data to form a solid foundation for flood risk assessments, floodplain management, and actuarial soundness of the National Flood Insurance Program"

### Goal 1: Flood Hazard Data

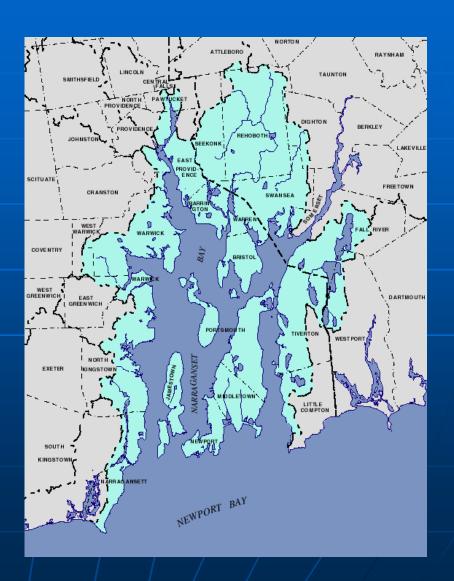
- Continue the update of modernizing maps
  - Goal: 80% new, updated, or still valid
- Watershed Basin Mapping
- Levees
- Coastal Flood Hazards!!
  - Goal: 100% of populated coastal areas





### Risk MAP in Rhode Island

- Narragansett Bay: High Risk
  - Coastal Restudies are a priority
  - Re-studies in Washington County coming soon!



### Why Re-Map What Was Just Done?

- Hydrologic and Hydraulic studies will be performed
- New LiDAR
- New DFIRMs will include LiMWA
  - Limit of Moderate Wave Action (LiMWA):
    - Inland limit of the area affected by waves greater than 1.5 feet
    - I.E. Coastal A

## Goal 2: Public Awareness/Outreach

"Ensure that a measurable increase of the public's awareness and understanding of risk management results in a measurable reduction of current and future vulnerability to flooding"

### Goal 2: Public Awareness/Outreach

- Flood risk assessments
- Social impacts of flood risks
- Incorporate Dam Safety and Hurricane Program messages
  - Risk of dam failure

Communication of Risk!



### Goal 3: Hazard Mitigation Planning

"Lead and support States, local, and Tribal communities to effectively engage in risk-based mitigation planning resulting in sustainable actions that reduce or eliminate risks to life and property from natural hazards."

### Goal 3: Hazard Mitigation Planning

- Emphasis on Hazard Mitigation Plans (HMPs) and Mitigation planning
- Integration at all levels
- National database for plans
- Inter-agency coordination

### Hazard Mitigation Plans

- Nationally:
  - 18,000 expiring in the next 5 years
- Statewide:
  - 19 communities expiring in 2010
  - 5 expiring in 2011
  - 9 communities don't even have a HMP

FEMA plans to support the grant programs that require a HMP as a condition of eligibility.

### Effectiveness of HMPs

- FEMA only reports the number of plans approved
- Ad hoc effectiveness measurement, if any

Are plans being implemented?

Does the implementation reduce risk?

Losses or damage avoided?

### **HMPs and More Communication**

- Continued integration with flood mapping and flood risk assessment
- Encourage integrated development of HMPs
  - Land-Use Decision Making
- Showcase communities with models of mitigation planning
  - "Best Practices" as examples

### Goal 4: Enhanced Digital Platform

"Provide an enhanced digital platform that improves management of Risk MAP, stewards information produced by Risk MAP, and improves communication and sharing of risk data and related products to all levels of government and the public."

### Goal 4: Enhanced Digital Platform

- Improve tracking of state and local HMPs
- Improve map production tools
- Find and invest in accurate digital geospatial data
- Continue to implement the National Flood Hazard Layer
- Perform comprehensive usability and requirements analysis for end-user tools

#### http://hazards.fema.gov

#### Mapping

INFORMATION PLATFORM

Log in | Need an Account? | FEMA Dictionary | MIP Help?

Home Risk MAP

News & Events Tools & Links Map Viewer MIP User Care



#### Tools For Professionals

- » Learn about el OMA
- » DFIRM Production Tools
- » WISE (includes Scoping Tools)

More Tools

#### Tips and Tutorials

- » How to Read a Flood Map
- » Read a Flood Insurance Study
- » Become a Cooperating Technical Partner

More Tips and Tutorials

#### Ouestions?

For general website or tools support, contact a Technical Support Specialist by calling 1-877-FEMA-MAP (1-877-336-2627) and then select option 2 or via email.

For questions related to Flood Hazard Mapping, contact a Map Specialist by calling 1-877-FEMA-MAP or via email.

#### your source for hazard info

Transitioning from Flood Map Modernization (Map Mod) to Risk Mapping, Assessment, and Planning (Risk MAP) for multi-hazard risk management, Learn More

#### **News and Highlights**

- » Service Pack 19 (SP19)
- » Storage Area Network (SAN) Migration
- » Service Pack 18 (SP18)
- » Studies Workflow Conference Call
- » Upcoming Service Packs and Scheduled Downtimes

#### **Upcoming Events**

» October 21 – 23 National Association of Flood and Stormwater Management Agencies (NAFSMA) Annual Meeting

Sponsor: National Association of Flood & Stormwater Management Agencies (NAFSMA)

Colorado Springs, CO

More Events

#### **HMA Grant Programs**

FEMA's Hazard Mitigation Assistance (HMA) grant programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages.

**HMA Grant Programs** 

Map Viewer Street: State: ZIP Code: Selec ▼ Create Map

**FEMA** 

#### MIP User Care

» Proceed to Map Viewer

- » FAOs
- » Access Requests
- » Support Requests
- » Training Materials

Wednesday, October 28,

 Please check this alert section for system status updates and notifications.

### Virginia Interoperability Picture for Emergency Response



### Goal 5: Alignment and Synergies

"Align Risk Analysis programs and develop synergies to enhance decision making capabilities through effective risk communication and management."

### Goal 5: Alignment and Synergies

Flood Hazard Data
(Mapping)

Risk **Assessment** 

Community Planning

### Miles City, Montana Pilot Project

New DFIRMS (de-accredited levee)

• HAZUS-MH:

water depth and loss estimates

Site Specific Building Data





### Risk MAP incorporates Lessons Learned from Pilots

- Expanded coordination and communication
  - Recommended formats for communication
- Develop risk assessment data during DFIRM process
  - Develop specifications for assessments
- Incentives for increased integration

### More Synergy: Dam Safety

- Include dam safety messages in outreach strategy
- Share expertise and methodology related to addressing dam failure risks
- Ensure hazard mitigation planning addresses dam failure

### More Synergy: Hurricane Program

- Include Hurricane Program messages in outreach strategy
- Leverage coastal analysis performed under Risk MAP for use within Hurricane Program
- Enhance HAZUS to address surge inundation areas



### And More Synergy

- National State Geographic Information Council
- USGS
- Census Bureau
- National Geodetic Survey
- National Weather Service
- NOAA Ocean Service
- US Army Corps of Engineers
- US Fish and Wildlife Service

### Risk MAP Players

- FEMA
  - Headquarters
  - Regions
- Contractors
  - Program Management
  - Production and technical services
  - Customer and data services
- State, Tribal, and Local Entities

### RIEMA's Role

- Coordination with NFIP and Grants
- Expanded coordination with Dam Safety and Hurricane Programs
- More outside agency coordination
- More in-house mapping capabilities
- Staff training in HAZUS
- Additional communications

### STARR's Role

- Production and Technical Services
  - Producing the New Maps in Region 1
  - Responsible for new engineering studies
  - Work with the state and communities throughout the process

### What Risk MAP Means to You?

- More Communication
  - Community involvement throughout

- Opportunities for:
  - LOMCs
  - Remapping

- Elevation Certificates
- Mitigation Design
- Hazard Mitigation Plans
- And More

## Beyond the LiMWA What will Risk MAP offer?

- A renewed commitment to mapping
- Broader foundation for Mitigation (HMPs)
- Renewed focus on integrating dam issues

# Communication of Risk!

